

2644/1

PTO/SB/21 (09-04)  
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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	Application Number	09/534,682
	Filing Date	March 24, 2000
	First Named Inventor	Lloyd Watts
	Art Unit	2644
	Examiner Name	Devona E. Faulk
Number of Pages in This Submission		13
Attorney Docket Number		PA2994US

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1) Confirmation Postcard; 2) Duplicate of Supplemental IDS (2pp); 3) PTO/SB/08 (x2); 4) List of Co-Pending Applications (1p, x2); 5) Copies of 13 Cited References; 6) Check for \$180.00
Remarks Total page number does not include postcard, check or copies of cited references.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	Carr & Ferrell LLP		Cust. No. 22830
Signature			
Printed name	Susan Yee		
Date	August 4, 2005	Reg. No.	41,388

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or printed name	Susan Yee, Reg. No. 41,388	Date	August 4, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Effective on 12/08/2004. Fees payable to the Consolidated Appropriations Act, 2005 (H.R. 4818). <b>FEETRANSMITTAL</b> <b>For FY 2005</b> AUG 08 2005		<b>Complete if Known</b>	
Applicant claims small entity status. See 37 CFR 1.27 TOTAL AMOUNT OF PAYMENT (\$ ) 180.00		Application Number	09/534,682
		Filing Date	March 24, 2000
		First Named Inventor	Lloyd Watts
		Examiner Name	Devona E. Faulk
		Art Unit	2644
		Attorney Docket No.	PA2994US

**METHOD OF PAYMENT (check all that apply)**
☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_

☒ Deposit Account Deposit Account Number: 06-0600 Deposit Account Name: Carr & Ferrell LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.
**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

<b>Total Claims</b> _____ - 20 or HP = _____ x _____ = _____ HP = highest number of total claims paid for, if greater than 20	<b>Extra Claims</b> _____ <b>Fee (\$)</b> _____ <b>Fee Paid (\$)</b> _____	<b>Multiple Dependent Claims</b> <b>Fee (\$)</b> _____ <b>Fee Paid (\$)</b> _____
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<b>Indep. Claims</b> _____ - 3 or HP = _____ x _____ = _____ HP = highest number of independent claims paid for, if greater than 3	<b>Extra Claims</b> _____ <b>Fee (\$)</b> _____ <b>Fee Paid (\$)</b> _____	
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**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

<b>Total Sheets</b> _____ - 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____	<b>Extra Sheets</b> _____ <b>Number of each additional 50 or fraction thereof</b> _____ <b>Fee (\$)</b> _____ <b>Fee Paid (\$)</b> _____	
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**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other: Information Disclosure Statement Fee

180

<b>SUBMITTED BY</b>		
Signature	Registration No. 41,388 (Attorney/Agent)	Telephone 650-812-3400
Name (Print/Type)	Susan Yee	Date August 4, 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Lloyd Watts

SERIAL NUMBER: 09/534,682

FILING DATE: March 24, 2000

TITLE: Efficient Computation of Log-Frequency-Scale Digital  
Filter Cascade

EXAMINER: Devona E. Faulk

ART UNIT: 2644

ATTY. DKT. NO.: PA2994US

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MAIL STOP AMENDMENT  
COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**  
Under 37 C.F.R. §§ 1.56, and 1.97-1.98

SIR:

Pursuant to the provisions of 37 C.F.R. §§ 1.56 and 1.97-98 of the Rules of Practice in Patent Cases, enclosed herewith is form PTO-SB-08 and a List of Co-Pending Patent Applications, listing several references; copies of the cited references are enclosed. Copies of the co-pending applications are not enclosed, as the applications are available via the Patent Application Information Retrieval system. As such, submission is not required under 37 C.F.R. § 1.98(a)(2)(iii).

The Examiner is requested to make these references of official record in this application. The references cited may be material to examination of the application and are submitted in compliance with Applicant's duty of disclosure as defined by 37 C.F.R. § 1.56.

08/09/2005 CNGUYEN2 00000006 09534682

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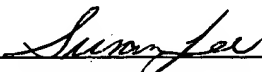
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No representation is made or intended as to the completeness of this list, nor is the inclusion of any reference on this list an admission that it is prior art or pertinent to this application.

Applicant hereby attaches the \$180 fee required by 37 C.F.R. §1.17(p) with this submission. The Commissioner is hereby authorized to charge Deposit Account No. 06-0600 for any additional fees that may be required, or credit our account for any overpayment charge. A copy of this statement is submitted in duplicate for this purpose.

Respectfully submitted,  
Lloyd Watts

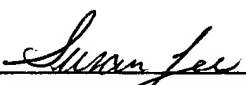
Dated: August 4, 2005

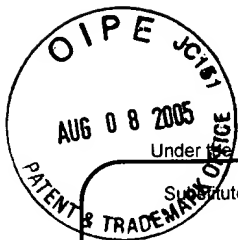
By:   
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FAX: (650) 812-3444

#### CERTIFICATE OF MAILING

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Dated: August 4, 2005

By:   
Susan Yee, Reg. No. 41,388



Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

Application Number	09/534,682
Filing Date	March 24, 2000
First Named Inventor	Lloyd Watts
Art Unit	2644
Examiner Name	Devona E. Faulk
Attorney Docket Number	PA2994US

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 4,433,604	02-28-1984	Ott	
		US- 4,812,996	03-14-1989	Stubbs	
		US- 5,187,776	02-16-1993	Yanker	
		US- 5,675,778	10-07-1997	Jones	
		US- 5,792,971	08-11-1998	Timis et al.	
		US- 6,140,809	10-31-2000	Doi	
		US- 6,513,004 B1	01-28-2003	Rigazio et al.	
		US- 2002/0147595 A1	10-10-2002	Baumgarte	
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**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	09/534,682
				Filing Date	March 24, 2000
				First Named Inventor	Lloyd Watts
				Art Unit	2644
				Examiner Name	Devona E. Faulk
Sheet	2	of	2	Attorney Docket Number	PA2994US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		JEONG et al., "Implementation of a New Algorithm Using the STFT with Variable Frequency Resolution for the Time-Frequency Auditory Model," Journal of Audio Eng. Soc., Vol. 47, No. 4, April 1991, pp. 240-251.	
		Syntrillium Software Corporation, "Cool Edit User's Manual," 1996, pp. 1-74.	
		WATTS, "Robust Hearing Systems for Intelligent Machines," Applied Neurosystems Corporation, 2001, pp. 1-5.	
		LIPPMANN, "Speech Recognition by Machines and Humans," Speech Communication 22, 1997, pp. 1-15.	
		HERMANISKY, "Should Recognizers Have Ears?" in the Proc. ESCA Tutorial and Research Workshop on Robust Speech Recognition for Unknown Communication Channels, France, 1997, pp. 1-10.	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Lloyd Watts

APPLICATION NO.: 09/534,682

FILED: March 24, 2000

TITLE: Efficient Computation of Log-Frequency-Scale Digital Filter Cascade

EXAMINER: Devona E. Faulk

GROUP ART UNIT: 2644

ATTY.DKT.NO.: PA2994US

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**List of Co-Pending Patent Applications That May Be Directed  
Towards Similar Subject Matter**

Examiner's Initials	Serial Number	First-Named Inventor	Title	Filing Date
	10/177,049	Lloyd Watts	Robust Hearing Systems for Intelligent Machines	June 21, 2002
	09/993,442	Lloyd Watts	Editing of Audio Signals	November 13, 2001
	10/074,991	Lloyd Watts	Filter Set for Frequency Analysis	February 13, 2002
Examiner's Signature:				Date